

Work Order ID 97491

February 21, 2013 7:08:24 AM

97491

Page 1

Item ID: D3628-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Cupped Washer
 Start Date: 2/20/13 Start Qty: 500.00 ***500*** Cust Item ID:
 Required Date: 3/08/13 Req'd Qty: 500.00 ***500*** Customer:
 Reference:

Approvals: Process Plan: CD Date: 13/02/21 Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Work Center ID	Operation Description	Set Up Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3628	C								

100 PURCHASING 0.00

100

Purchasing

Purchasing

Memo

Issue P/O: 19046
 Email or Ship DXF file to vendor
 Laser Cut D3628-1 flat pattern and form as per Dwg D3628
 Possible Supplier: GFI
 Material release note is required

CD 13/02/21 500

110 Receive & Inspect for Damage & Mat'l Certs 0.00

110

Packaging

Packaging

Memo

Ensure material certification is attached

P 13/2/21 500

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
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Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

Work Order ID 97491***97491***

Page 2

February 21, 2013 7:08:24 AM

Item ID: D3628-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Cupped Washer
Start Date: 2/20/13 Start Qty: 500.00 ***500*** Cust Item ID:
Required Date: 3/08/13 Req'd Qty: 500.00 ***500*** Customer:
Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start ***NR1***
QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC6- Inspect dimensions to drawing Memo	0.00 0.00				500			
130 *130* Packaging Packaging	Identify as per dwg & Stock Location: <u>ST60</u> Memo	0.00 0.00				500x			SP 13-2-22
140 *140* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00							13/2/25 JH p113 02-22

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											

FAULT CATEGORY												
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other	

Picklist Print

February 21, 2013 7:08:24 AM

Page 1

Work Order ID: 97491

Parent Item: D3628-1

Parent Item Name: Cupped Washer

Start Date: 2/20/13

Required Date: 3/08/13

Start Qty: 500.00

Required Qty: 500.00

Comments: IPP Rev:A New Issue 07-05-28 JLM
IPP Rev:B Removed Powder 07-07-11 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3628-1P CUPPED WASHER		Purchased	No			110	Each	0.0000	1	500			

4/3/2/2 1 (500)

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

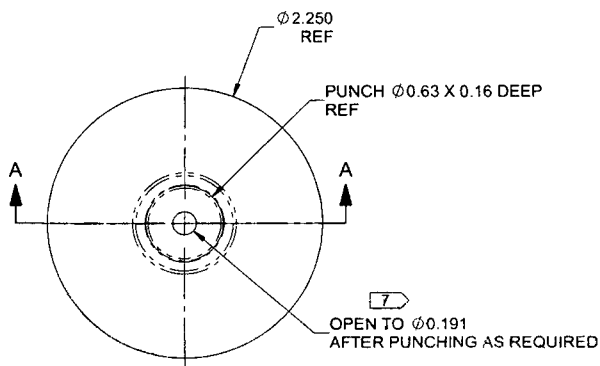
Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
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Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

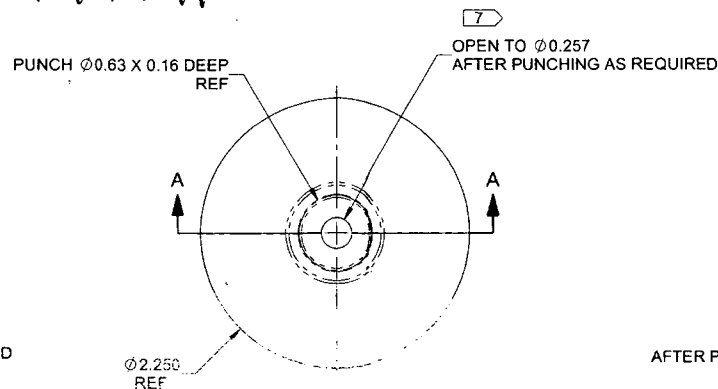
FAULT CATEGORY

Landing Gear	General	Other
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized
		<input type="checkbox"/> Over/Under tolerance
		<input type="checkbox"/> Part Incorrect
		<input type="checkbox"/> Part Lost/Missing
		<input type="checkbox"/> Part Moved
		<input type="checkbox"/> Positioned Wrong
		<input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced
		<input type="checkbox"/> Temperature/Cure
		<input type="checkbox"/> Weld
		<input type="checkbox"/> Wrong Stock Pulled
		<input type="checkbox"/> Other

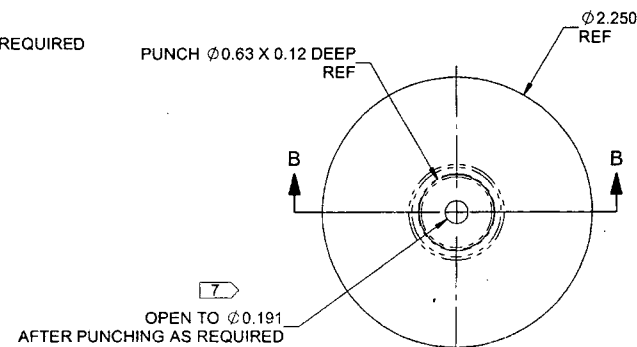
CL 13/02/21
W10.97491



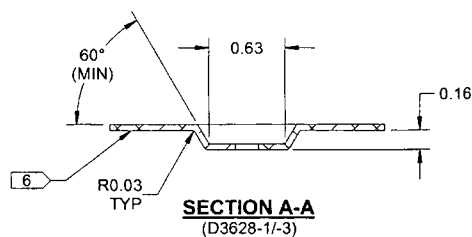
D3628-1 CUPPED WASHER



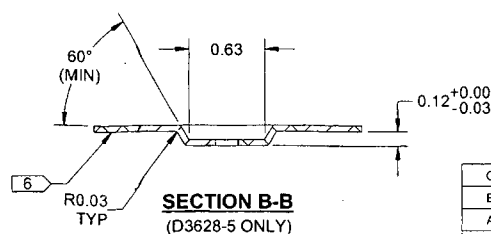
D3628-3 CUPPED WASHER



D3628-5 CUPPED WASHER



SECTION A-A
(D3628-1/3)



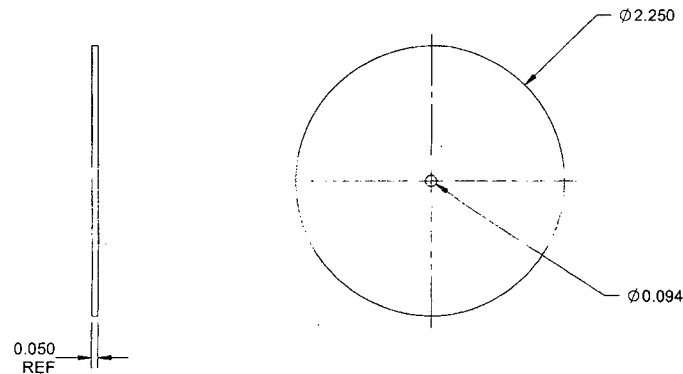
SECTION B-B
(D3628-5 ONLY)

NOTES:

- 1) MATERIAL: MADE FROM D3628-1F
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.5
- 7) WHEN DRILLING OUT THE CENTRE HOLE AFTER PUNCHING, ENSURE THAT THE HOLE IS DRILLED CONCENTRIC TO THE CUPPED AREA, WITHIN 0.03
- 8) WEIGHT: 0.02 lbs

RELEASE
2012-05-07

C	UPDATE DWG TO CURRENT STD; ADD -5, ZN C1-1.	DC	12.04.19
B	REMOVE POWDER COAT	CB	07.07.09
A	NEW ISSUE	CB	07.06.08
REV.	DESCRIPTION	BY	DATE
DESIGN	BC	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	BC		
CHECKED	BE	DRAWING NO.	REV. C
MFG. APPR.	BE	D3628	SHEET 1 OF 2
APPROVED	140	TITLE	SCALE
DE APPR.	140	CUPPED WASHER	NTS
DATE	12.04.19	COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	



D3628-1F FLAT PATTERN

RELEASED
2012-05-07
WPD

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, 18 GAUGE (0.050 THICK)
ANNEALED, 2B FINISH
PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240
REF DART SPEC M304S18GA
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.02 lbs

DESIGN	DC	DART AEROSPACE LTD	
DRAWN	DC	HAWKESBURY, ONTARIO, CANADA	
CHECKED	EE	DRAWING NO.	REV. C
MFG. APPR.	EE	D3628	SHEET 2 OF 2
APPROVED	10	TITLE	SCALE
DE APPR.	10	CUPPED WASHER	NTS.
DATE	12.04.19	<small>COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE, OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577

OUTSTANDING PO REPRINT

Purchase Order ID PO19046

Purchase Order Date 2/07/13

PO Print Date 2/21/13

Page Number 1 of 1

Order From :

VC-GFI001

GFI
180 AVENUE LABROSSE
POINTE CLAIRE, QC H9R 1A1
CA

Contact Name
Vendor Phone
Vendor Fax
Vendor Account Nbr

514 630 4877
514 630 4849

Buyer Chantal Lavoie
Requisition Nbr
Tax Resale Nbr 10127-2607
Terms Net 30
Currency CAD
FOB Destination-Collect

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty	Unit Price	Extended Price
----------	--	------------------------	----------------------	---------	------------	----------------

Ship To : DART AEROSPACE LTD 1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req. Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
2	D3628-1P	CUPPED WASHER	2/28/13 Yes	✓ 500.00 Each	FedEx PI collect	\$2.4160	\$1,208.00

Special Inst: AS PER DWG D3628 REV. C
B97491

Line Total: \$1,208.00

Outstanding PO Total: \$1,208.00

MATERIAL CERTIFICATION
REQ'D UPON DELIVERY

CERTIFICATE OF CONFORMITY
REQ'D UPON DELIVERY

Change Nbr: 2

Change Date: 2/21/13

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required YES NO



180 AVENUE LABROSSE
POINTE-CLAIRE, QC, CANADA H9R 1A1
TÉL.:(514) 630-4877 - FAX:(514) 630-4849

GFI est une division de Thomas & Betts Fabrication Inc. / GFI is a division of Thomas & Betts Manufacturing Inc.



BON DE LIVRAISON / SHIPPING MEMO

DATE DE LIVRAISON / SHIPPING DATE			N° DE BON DE LIVRAISON / SHIPPING MEMO NO	PAGE
FR	DD	MM	AN	YR
18	02	13	0507489	1/1



VENDU À / SOLD TO

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON
K6A 1K7

EXPÉDIÉ À / SHIP TO

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON
K6A 1K7

CODE DE CLIENT / CUSTOMER CODE	N° DE CONTRAT / JOB NO	VOTRE N° DE COMMANDE / YOUR PURCHASE ORDER NO	EXPÉDIÉ PAR / SHIP VIA
DART	GFI-0299	0263693	PO19046
QUANTITÉ / QUANTITY	N° DE PIÈCE / PART NO	DESCRIPTION	
500	D3628-1P	CUPPED WASHER	

MFG. JOB# 30263693-001 QTY 500 pcs.

DUE DATE: 28 February 2013



EXPÉDITEUR / SHIPPER

N° DE BON DE LIVRAISON / SHIPPING MEMO NO



REÇU PAR / RECEIVED BY

DATE

TOUTES LES RÉCLAMATIONS DOIVENT ÊTRE FAITES EN DEDANS DE 5 JOURS DE LA RÉCEPTION.
ALL CLAIMS MUST BE MADE WITHIN 5 DAYS OF RECEIPT OF GOODS.

CERTIFICATE OF COMPLIANCE CERTIFICAT DE CONFORMITE



Membre de / A Member of **Thomas & Betts**

180 LABROSSE AVENUE
POINTE CLAIRE, QC
H9R 1A1

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7

CERTIFICATE NO.	11	OUR JOB NO	J0263693	SHIPPING MEMO	0507489	
ITEM	QUANTITY	PURCHASE ORDER	PART NUMBER	REV	NAME	DWG ISSUE
-	500 PCS	PO19046	D3628-1P	C	CUPPED WASHER	C
MATERIAL		SUPPLIED BY		MAT. REL. NO.		
AMS 5513 304 ANN		TW METALS / ALLEGHENY LUDLUM		H/N 980065		

	PROCESS	PROCESSOR	RELEASE NOTE #
1	FIRST ARTICLE INSPECTION REPORT ON FILE	GFI	N/A
2	REF. GFI MANUFACTURING JOB NUMBER J0263693-001 (500 PCS)		
3			
4			
5			
6			
7			
8			
9			

WE HEREBY CERTIFY ALL THE PARTS COVERED BY THIS CERTIFICATE HAVE BEEN MANUFACTURED FROM MATERIAL SUPPLIED ON RELEASE NOTE SHOWN ABOVE AND THAT ALL PARTS HAVE BEEN INDIVIDUALLY INSPECTED AND CONFORM TO THE DRAWINGS AND PURCHASE ORDER REFERENCED ABOVE.

DATE **18 FEBRUARY 2013**

G.F.I. Q.C. REP.

Signature
GFI Q.C. REP.

W METALS

CUST NUMBER: 1203148

ORDER NO.: 03306283

FROM: CINC

PAGE 1

SOLD TO:

NET WGT:

252.000

REQ. DATE: 02/06/13 CONFIRMED

GFI INC
180 AVE. LABROSSE
PONTE CLAIRE QC
CANADA

SHIP TO:
GFI INC
180 AVE LABROSSE
PIONTE CLAIR QC
CANADA

CN H9R 1A1

CN H9R 1A1

SALESPERSON:

DEANNA PIMM

TERMS:

1% 10 NET 30

F.O.B.:

SHIPPING POINT

CUST ORD NO.:

0081864

SHIP BY:

01/30/13

VIA:

ROADWAY EXPRES

FREIGHT:

COLLECT

RELEASE NO.:

RECEIVING PHONE:

514 630-4877

WIDTH

LENGTH

LINE ITEM DESCRIPTION

0001 51073 304 S/S SHEET * AMS 5513 .050
QTY: 4.000 EA

PART#: TS050361204A

WT:

252.000 PC:

36

120

4.000 EA

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: EAR99

Export License: NLR

PO: 49282420 HT: 980065

PC: 4

Expiration Date: 0/00/00

MLT: UNITED STATES

MFG: UNITED STATES

SLB/CL: TEST#8797948

SHIP VIA YELLOW COLLECT

CLEAR CUSTOMS THRU CONSIGNEE'S BROKER: DHL GLOBAL FORWARDING

ISABELLE 514-734-4534 OR SYLVAIN 514-734-4527

FAX 514-344-8705

TW METALS

ORDER NO.: 03306283

FROM: CINC

CUST NUMBER: 1203148 NET WGT:
SOLD TO:
GFI INC
180 AVE. LABROSSE
POINTE CLAIRE QC
CANADA

252.000 REQ. DATE: 02/06/13 CONFIRMED
SHIP TO:
GFI INC
180 AVE LABROSSE
POINTE CLAIR QC
CANADA

CN H9R 1A1

CN H9R 1A1

SALESPERSON: DEANNA PIMM
TERMS: 1% 10 NET 30
F.O.B.: SHIPPING POINT
CUST ORD NO.: 0081864
VIA: ROADWAY EXPRES
FREIGHT: COLLECT
RELEASE NO.:
RECEIVING PHONE: 514 630-4877

SHIP BY:
7640 REINHOLD DR
CINCINNATI

01/30/13

OH 45237

"TW Metals MSDS data is available on our web site at www.twmetals.com. MSDS data can be found under the Technical Resources Tab, Product Statistics & Data and the TW Metals MSDS's heading. If you do not have web site access you may telephone 610-458-1300 and we will mail or fax a copy of our current MSDS data to your location."

"CERTIFICATE OF CONFORMANCE"

TW Metals certifies that the material supplied on this purchase order and contained in the heat/lot number referenced above has been manufactured, inspected, and tested in accordance with the material specification. These records are on file at TW Metals. Packaging material for shipments to Europe & China consists of manufactured wood products and complies with the European emergency measures for coniferous non-manufactured wood packing material."

Electronically Generated Certificate-Valid without signature Date: 1/30/13

These commodities have been exported from the United States in accordance with the U.S. export control laws, export administrations regulations. No exportation contrary to U.S. law prohibited.

THANK YOU FOR THIS ORDER

TERMS AND CONDITIONS APPLICABLE TO THE SALE OF THESE PRODUCTS ARE SET FORTH ON THE REVERSE SIDE FOR YOUR CAREFUL REVIEW.

NOTICE OF SHIPMENT/
PACKING LIST

CUST. ORD. NO. & DATE

M 49282420

SOLD TO 4 SHIP TO 1

TW METALS INC
PO BOX 644
EXTON

08/23/12 CUST. CODE 974093

PA 19341



ACCEPTING MILL

VANDERGRIFT, PA.

REPEAT ORDER 95434-1
DO RATE 138
PRIME SEC.
DSO DSO
56

SHIPPER NO. 556118

GOVT CONTRACT

CERTIFICATE OF TEST

AL 6108-4 1211

PRODUCT CODE

13020102060000

MILL ORDER NUMBER

30-082-537

DATE SHIPPED

10/15/12

MATL

1121 VANDERGRIFT

SHIPPING LOCATION

PA

INVOICE

659294

SHIP TO

SPECIALTY METALS PROCESSING
837 SEASONS ROAD
STOW

OH 44224

GRADE AND SPECIFICATIONS
"ATI 304" STAINLESS STEEL SHEET C R COILS ANNEALED 2B FIN 3 EDGE (AMS 5513J) (ASTM-A-666-10) (ASME-SA-240 ED 2010) (ASTM-A-240-12) (CP49-7.4.2-005 REV 7) (6/14/12 EXCEPT TO CP49-7.4.2-005)

ITEM PCS DIMENSIONS W/G/L

001 1 36./0.050/2346.
C CUST IDENTITY 47252
1 SKID

HEAT # COIL #

980065 09112N183

TEST #

8797948

GROSS TARE NET

14090 50 14040

14090 50 14040

THEO TAG #/ CD SKID #

893289

DIST:

MAIL AND FAX ACK, S/N AND INVOICE TO "ATTN: CARA TURNER" @ 484-359-9236. FAX IN ADVANCE OF SHIPMENT ALL CT'S TO 484-359-9236. ATTN: CARA TURNER

TYPE HEAT/TEST
HEAT 980065
TEST LOCATION

ITEM TEST NO
001 8797948

TEST LOCATION

ITEM TEST NO
001 8797948

---C---	---MN---	---P---	---S---	---SI---	---CR---	---NI---	---MO---	---CU---	---N---
.05	1.19	.034	.0004	.36	18.20	8.03	.45	.52	.08
MI	MI	MI	MI	MI	MI	MI	MI	MI	MI

YIELD
PSI *

T 52000.

TC

* Y.S. BY 0.2% OFFSET METHOD

MELT
SOURCE

1.

TENSILE % ELONG
PSI IN 2"

96500.

TC

53.

TC

% R/A

NR

HARDNESS

86.HRBW

86.HRBW

TC

BEND

A 262 PR E

T PASS

TC

CORROSION

PASS

TC

GRAIN

SIZE

NR

HARDENABILITY

NR

NR = DATA NOT REQUIRED
GRADE VERIFICATION WAS CARRIED OUT SPECTROSCOPICALLY
PAGE 01 - CONTINUED ON PAGE 02

CONSIGNEE-Please Note-This consignment was turned over to carrier in first class condition, being correctly loaded, at which time our responsibility for loss or damage in shipment ceased. For your protection please examine shipment as it arrives. If any shortage or damage is discovered, having a full description made by transportation agent immediately before signing.

Material Safety Data Sheets for this product have been supplied to your Purchasing Department. For an additional copy contact 724-228-8980. CAUTION: Processing that makes use of heat, dust, or solutions may cause lung disease. See Material Safety Data Sheets for further information.

WARNING: Les fiches d'information-sécurité de ce produit ont été fournies à votre département chargé des achats. Pour obtenir des exemplaires supplémentaires veuillez téléphoner au numéro suivant 724-228-8980. Attention: les procédés impliquant la production de vapeurs, poussières, ou solutions peuvent être cause de maladies pulmonaires. Pour plus de renseignements se référer aux fiches d'information-sécurité.

This above is a true copy of data on file. The material and test results conform to the sales contract and specification(s) as set forth in Allegheny Ludlum's Order Acknowledgment.

Stephen Wolff
Director, Corporate Quality Assurance

TW METALS
M49282420
Oct 17 2012
ACCEPTED BY

NOTICE OF SHIPMENT/
PACKING LIST

CUST. ORD. NO. & DATE

M 49282420

FORMS DISTRIBUTION
SOLD TO → 4 SHIP TO → 1

TW METALS INC
PO BOX 644
EXTON

08/23/12
PA 19341

CUST. CODE

974093



ACCEPTING MILL

VANDERGRIFF, PA.

REPEAT ORDER 95434-1
DO RATE 38
PRIME SEC.
DSO DSO
56

SHIPPER NO.

556118

GOVT CONTRACT

PRODUCT CODE

13020102060000

SHIP TO
1121 VANDERGRIFF

SPECIALTY METALS PROCESSING
837 SEASONS ROAD
STOW

CERTIFICATE OF TEST

AL 8188-4 1211

MILL ORDER NUMBER

30-082-537

DATE SHIPPED

10/15/12

SHIPPING LOCATION

PA

INVOICE

659294

OH 44224

GRADE AND SPECIFICATIONS
"ATI 304" STAINLESS STEEL SHEET C R COILS ANNEALED 2B FIN 3 EDGE (AMS 5513J) (ASTM-A-666-10) (ASME-SA-240 ED 2010) (ASTM-A-240-12) (CP49-7.4.2-005 REV 7) (6/14/12 EXCEPT TO CP49-7.4.2-005)
DIN EN 10204:2005 - 3.1 CERTIFICATE DOES NOT INDICATE PED APPROVAL FOR THIS MATERIAL.
ATI ALLEGHENY LUDLUM DOES NOT USE MERCURY IN THE TESTING OR PRODUCTION OF ITS PRODUCTS.
MATERIAL IS OF USA MELT AND MANUFACTURE.
NO WELDS/WELD REPAIRS PERFORMED.

THIS DIN EN 10204:2005 - 3.1 CERTIFICATE OF TEST SHALL NOT BE REPRODUCED EXCEPT IN FULL. FEDERAL LAW PROHIBITS THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULENT STATEMENTS OR ENTRIES ON THE CERTIFICATE AND MAY BE PUNISHABLE AS A FELONY UNDER FEDERAL LAW. ATI AL HOLDS SEVERAL QUALITY CERTIFICATIONS THAT INCLUDE ISO-9001, AS9100, NADCAP, AND ISO/IEC 17025. MATERIAL WAS MANUFACTURED IN ACCORDANCE WITH THE ATI AL QUALITY MANUAL REVISION 20 DATED 02/24/2012.

ATI ALLEGHENY LUDLUM PERFORMS CHEMICAL ANALYSIS BY THE FOLLOWING TECHNIQUES:
C, S BY COMBUSTION/INFRARED
N, O, H BY INERT FUSION/THERMAL CONDUCTIVITY
MN, P, SI, CR, NI, MO, CU, CB, CO, V BY WDXRF
B BY OES
AL AND TI (>=0.10%) BY WDXRF, OTHERWISE BY OES
PB, BI, AG BY GFAA

THE NUMERIC CODES SHOWN UNDER MELT SOURCE CAN BE INTERPRETED AS FOLLOWS:
1. - MATERIAL MELTED, ROLLED AND TESTED IN THE UNITED STATES.
2. - FOREIGN MELT; ROLLED AND TESTED IN THE UNITED STATES.

PAGE 02 - CONTINUED ON PAGE 03

CONSIGNEE: Please Note-This consignment was turned over to carrier in first class condition, being correctly loaded, at which time our responsibility for loss or damage in shipment ceased. For your protection please examine shipment as it arrives. If any shortage or damage is discovered, have a full description made by transportation agent on waybill before signing.

Material Safety Data Sheets for this product have been supplied to your Purchasing Department. For an additional copy phone 724-228-6880. CAUTION: Processing this material without proper ventilation may cause lung disease. See Material Safety Data Sheets for further information.

WARNING Les fiches d'information-sécurité de ce produit ont été fournies à votre département chargé des achats. Pour obtenir des exemplaires supplémentaires veuillez téléphoner au numéro 724-228-6880. Attention: les procédés de traitement de ce produit sans ventilation adéquate peuvent être cause de maladies pulmonaires. Pour plus de renseignements se référer aux fiches d'information-sécurité.

The above is a true copy of data on file. The material and test both in Allegheny Ludlum's Order Acknowledgment.

Stephen Wolf
Director, Corporate Quality Assurance

TW METALS
M49282420
TEST
OCT 17 2012
ACCEPTED BY

10/15/12 09:28:34

NOTICE OF SHIPMENT/
PACKING LIST

CUST. ORD. NO. & DATE
M 49282420
FORMS DISTRIBUTION
SOLD TO
TW METALS INC
PO BOX 644
EXTON

08/23/12 CUST. CODE
974093
PA 19341



VANDERGRIFF, PA.
SHIPPER NO 556118
GOVT CONTRACT
REPEAT ORDER DO PRL ORITY
95434-1 38
PRIME SEC.
DSO DSO
56

CERTIFICATE OF TEST

AL 6188-4 1211

PRODUCT CODE 13020102060000
MILL ORDER NUMBER 30-082-537
SHIPPING LOCATION PA
DATE SHIPPED 10/15/12
INVOICE 659294

SHIP TO
SPECIALTY METALS PROCESSING
837 SEASONS ROAD
STOW

OH 44224

GRADE AND SPECIFICATIONS

"ATI 304" STAINLESS STEEL SHEET C R COILS ANNEALED 2B FIN 3 EDGE (AMS 5513J) (ASTM-A-666-10) (ASME-SA-240 ED 2010) (ASTM-A-240-12) (CP49-7.4.2-005 REV 7) (6/14/12 EXCEPT TO CP49-7.4.2-005)

TESTING WAS PERFORMED AT THE FOLLOWING LOCATIONS:
MI = ATI-ALLEGHENY LUDLUM; 950 TENTH STREET; MIDLAND, PA 15059
TC = ATI-ALLEGHENY LUDLUM; 1300 PACIFIC AVENUE; NATRONA HEIGHTS, PA 15065

FOR ACCESS TO ONLINE CERTIFICATES OF TEST
REGISTER AT WWW.ALCEXTRA.COM

PAGE 03 - FINAL PAGE.

TW METALS
M49282420
TEST
OCT 17 2012
ACCEPTED BY

10/15/12 09:28:34

CONSIGNEE: Please Note—The consignment was turned over to center in first class condition, being correctly loaded, at which time our responsibility for loss or damage in shipment ceased. For your protection please examine shipment as it arrives. If any shortage or damage is discovered, have a full description made by transportation agent on waybill before signing.

Materials Safety Data Sheets for this product have been supplied to your Purchasing Department. For an additional copy please call 724-226-5960. CAUTION: Processing that makes use of heat, acid, or solvents may cause lung disease. See Material Safety Data Sheets for further information.

WARNING Les fiches d'information—sécurité de ce produit ont été fournies à votre département chargé des achats. Pour obtenir des exemplaires supplémentaires veuillez téléphoner au numéro suivant 724-226-5960. Attention: les traitements métallurgiques de production de vapeur, poissonnage, ou solution peuvent être causes de maladies pulmonaires. Pour plus de renseignements se référer aux fiches d'information-sécurité.

The above is a true copy of data of file. The material and test results conform to the sales contract and specification(s) as set forth in Allegheny Ludlum's Order Acknowledgement.
Stephen Wolf - Director, Corporate Quality Assurance